

and all these friends with a warm handclap at the Festival.

Sincerely,
Sarah Gertrude Knott

NEW LEGION POST APPRECIATES

Dear Mr. Beliajus:

At a recent meeting of the directors of this organization, we took the liberty of discussing your activities in behalf of the servicemen during the war, and came to the conclusion that, you were one of the outstanding men in your community engaged in this type of work.

We, of the Don Varnas Post American Legion, feel that it's an honor and a pleasure to have you with us, as an honorary booster member, and invite you to participate at our next meeting on March 4th.

We would like to introduce you to our members, and personally thank you for your fine work, as a member of the Military Committee from tris community.

We are already planning on giving a formal recognition to several civilian workers, who have done a lot for us and our comrades during the war. We take great pleasure in noting that your name appears among the first on the list.

Thanking you again, and hoping to have the pleasure of your presence at our meeting, we remain,

Sincerely yours,
Jack L. Jatis, Comm.
Per Clem Globis, Ex. Sec'y.

B A B I E S ...



Karen Jean arrived on Wednesday, Feb. 27th at 12:15 A.M. (missed my birthday by 15 minutes) at the Little Company of Mary Hospital; weight 8 lbs. and 14 oz. Her parents are Mr. and Mrs. Tom Shemaitis (nee Genevieve Manelis, cousin of Lil Cinskas-Dulys). The very best wishes to you all.

A daughter of 6- $\frac{1}{4}$ lbs., Jeanette Estelle, arrived on St. Kazimir's Day, March 4th, to my cousins, Ernest and Estelle Dulinsky, on a farm near Lowell, Indiana. It seemed to have happened very suddenly. Estelle was writing me a letter, not having any idea that the baby would arrive soon, when.... The letter wasn't finished, at that time, and Ernie had to be midwife. The letter carried a post script: "Girl born; 6- $\frac{1}{4}$ lbs.; Ernest M.D." Two other children, Gail Ann and Ernie Jr., are excited with the new live doll. Sincerest congrats to you all.

Former Lt. Scotty Bain, drove me out to Lowell, Ind., to see the new babe. Meanwhile, we had a pleasant visit with Ernie, Estelle and the children.

Mr. and Mrs. Robert Astrella of Fairhope, Ala., are the proud parents of a son, who was born March 14th. The baby weighed 8 $\frac{1}{2}$ lbs., and was named Robert Louis.

Mrs. Astrella, an Irish girl, met Bob when he was serving with the Army Air Corps, in England. She came over from Ireland a few months ago. To the Astrellas we extend our sincerest congrats.

SCIENCE AND RELIGION AS PARTNERS

Abdu '1-Baha

Humanity is like a bird whose wings are religion and science. It cannot fly with one wing of religion alone it will land in the slough of superstition, and if it tries to fly with the wing of science alone it will end in the dreary bog of materialism When religion, shorn of its superstitions, traditions and unintelligent dogmas, shows its conformity with science, then there will be a great unifying, cleansing force in the world, which will 'sweep before it all wars, disagreements, discords and struggles, and then will mankind be united in the power of the love of God.

FOR THE RECORD

"A Communist must be prepared for everything; for great sacrifices — if this is necessary — for all possible uses, deceptions, illegal methods, omissions and concealments of truth." Lenin in LEFT WING COMMUNISM AND INFANTILE SICKNESS.

"From European history we know that every time treaties have been signed, envisaging a new arrangement of forces for new wars, these treaties have been called treaties of peace." Stalin at the Fourteenth Communist Party Congress in 1926.

"Therefore, not only is it an idiocy, but it is also a CRIMINAL OFFENSE to conduct such a war 'TO DESTROY HITLERISM' ". Commisar MOLOTOV in September 31, 1939.



THE ADLER PLANETARIUM

By PHILIP FOX

Over the world there are many museums of art, where are collected masterpieces from the brush, the chisel, the goldsmith's table, the potter's wheel, or the loom, — things which bear witness to man's age-long striving for the expression of beauty, in form of color or texture. Fewer however, are the museums where one may look for evidence of man's intellectual awakening expressed in the development of his powers of reason; and fewer still, but of growing importance, are the museums of the physical sciences. These museums come as powerful aids to the great libraries, storehouses of learning.

If all persons could be informed of the successive advances of science, if the phenomena and the laws which govern them and which may be derived from orderly consideration of them could be presented in such way as to win general understanding, the progress of learning would be greatly accelerated. It should be the aim of every museum of science to exhibit its material with this end in view. Such attempts in the natural science have perhaps been more extensive and perhaps more successful than those in the physical sciences. One sees many interesting and instructive exhibits in numerous museums of Natural History. It is more difficult to prepare in form for easy comprehension exhibits to illustrate the phenomena and laws of those sciences which talk hand in hand with mathematics.

The Adler Planetarium and Astronomical Museum of Chicago, an institution of type quite new to America, opened its doors to the public on May 12, 1930. The institution had been dedicated, and presented to the South Park Commissioners, on the tenth of May in the presence

of a distinguished company. It is natural for one interested in astronomy to inquire how this institution came into being, how it is housed, what may be seen there, what is its purpose, and what response the public has given to its offerings.

Its origin may be found in the development at Jena of the optical planetarium and in the generosity of the donor, Mr. Max Adler of Chicago. Mr. Adler's aim is well expressed in the following quotations from his presentation address:

"Chicago has been striving to create, and in large measures has succeeded in creating, facilities for its citizens of today to live a life richer and more full of meaning than was available for the citizens of yesterday. Toward the creation of such opportunities I have desired to contribute.

"The popular conception of the universe is too meager; the planets and the stars are too far removed from general knowledge. In our reflections, we dwell too little upon the concept that the world and all human endeavor within it are governed by established order and too infrequently upon the truth that under the heavens everything is interrelated, even as each of us to the other."

Though this Chicago Institution bears a double name and is commonly referred to as the Planetarium, it is in reality an Astronomical Museum of which the Planetarium instrument is the principal exhibit.

It stands on an island in Lake Michigan to the east of those neighboring institutions, the Field Museum of Natural History and the Shedd Aquarium. The three are fittingly closely associated and form a trinity dedicated to the study of "The Heavens above, the Earth beneath, and the waters under the Earth."

The approach to the building from the west is a broad esplanade with walks and roadways flanking a series of twelve shallow pools, on the bottom of which in colorful terrazzo are designs symbolic of the month of the year.

The building is an imposing edifice of rainbow granite with copper dome. The exterior diameter is 160 feet. Inset at the exterior corners are bronze plaques of the twelve Signs of the Zodiac by Alfonso Iannelli.

Centrally located within the building is the circular planetarium chamber 72 feet in diameter, carrying a hemispherical dome of 68 feet diameter. The linen of the dome is stretched over horizontal battens circling the dome like almucantars. The whole is suspended by metal straps from the outer dome. The outer dome has a diameter of eighty feet and is non-concentric with the linen surface. This arrangement results in favorable acoustics. An air-conditioning unit by the Carrier Engineering Corporation installed in preparation for the intensive use during the Century of Progress Exposition keeps the Planetarium chamber at comfortable temperature.

About the central hall are the entrance foyer, museum corridors, offices, library, and a small lecture room. The entrance faces to the west; the offices look to the east on Lake Michigan. Over the offices there is a room for bookshelves and instruments. The lower floor of the building contains the main museum space, a lecture room seating 170, rest rooms, instrument shops, photographic dark rooms, and the heating, ventilating, and air-conditioning installations. There is a broad upper promenade deck for view of the sky. Portable instruments are carried there on clear evenings. The coelostat for throwing the solar image into the museum chamber below is also on the deck.

The building is regarded as of such merit that for its design the architect, Ernest A. Grunsfeld, Jr., was awarded the 1931 gold medal of the Chicago Chapter of the American Institute of Architects.



Probably the first natural phenomenon to impress itself on man as he began to observe and reason was the orderly succession of day and night. And while he was grateful to the Sun for its light and warmth and the protection and comfort which it afforded, he marvelled no more concerning the Sun than he did about the stars wheeling in the night sky. He saw the Moon and traced her course among the stars in recurrent phases and saw the brighter planets threading their complex ways. It was long before he was able to unify these Phenomena into an harmonious scheme of action, in fact, not until Ptolemy (100-170 A.D.) made his Earth-centered hypothesis with its complex system of epicycles. This hypothesis yielded reluctantly to the Sun-centered theory of Copernicus (1473-1543).

After the announcement of these theories, ingenious men began to make models to represent by means of globes suitably geared together, the observed or calculated motions of the planets and Moon and later also of the other satellites. Not the first, for it is stated that such models date back to Archimedes, but among the earlier of them is that of Christian Huygens constructed in 1682 by the horologist Johannes van Ceulen de la Haye... These instruments were developed until they became very serviceable in illustrating the phenomena of day and night, of the seasons, of lunar phases, eclipses, transits, occultations, all planetary configurations...

Such instruments varying in size and complexity are to be found widespread... In America those by David Rittenhouse, begun in 1767, are worthy of mention: one is at present preserved in Philadelphia.

It is not surprising that an engineer, Dr. W. Bauersfeld, of the firm of Carl Zeiss, Jena, should have evolved the following proposition: "The great sphere shall be fixed, its inner white surface shall serve as the projection surface for many small projectors which shall be placed in the center of the sphere. The reciprocal positions and motions of the little projectors shall be interconnected by suitable driving gears in such manner that the little images of the heavenly bodies, thrown upon the fixed hemisphere, shall represent the stars visible to the naked eye, in position and in motion, just as we are accustomed to see them in the natural clear sky." It took Dr. Bauersfeld and his staff of collaborators and workmen a full five years to demonstrate the practicability of the proposition. No more versatile instrument than that which was evolved was ever invented for exhibiting the phenomena of a given science. Its success is convincing, even inspiring. It fittingly occupies the central place in the Astronomical Museum of Chicago.

Here is a museum devoted to the noblest aspiration of man's mind, the understanding of the universe. Here he may let his mind grope outward into limitless space nor remain forever earthbound, shrinking the universe to his petty stature. Better be again a clod of clay of that Earth from which he came than never to have risen to the height from which the wide vision of creation may be obtained and have felt that glorious exaltation of him who cried:

"THEN I FELT LIKE SOME WATCHER OF THE SKY."